



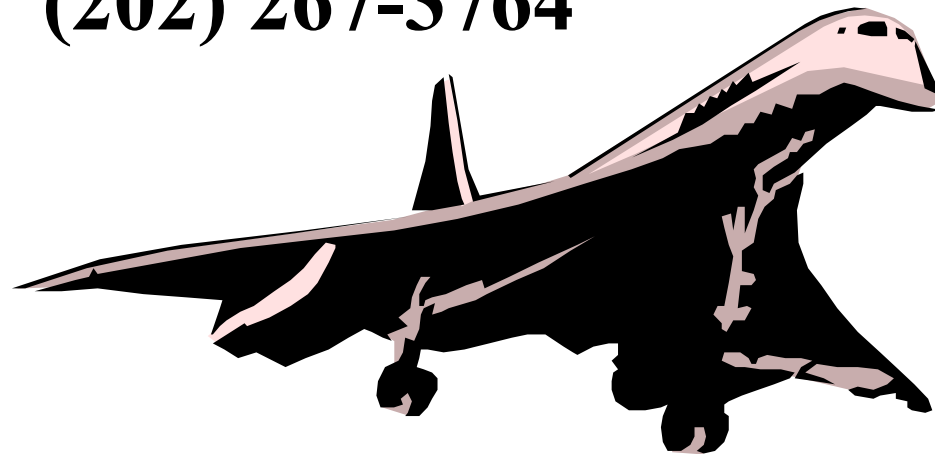
OPSS

Tom Penland

Manager, Special Programs Branch

AFS-260

(202) 267-3764



Air Transportation Division, AFS-200/300

OPSS

Operations Specification Subsystem



OPSS



◆ Overview

◆ Architecture & Processing Environment

◆ Operations

◆ Deployment



OPSS

Overview

The Old OPSS

vs.

The New OPSS



The Old OPSS

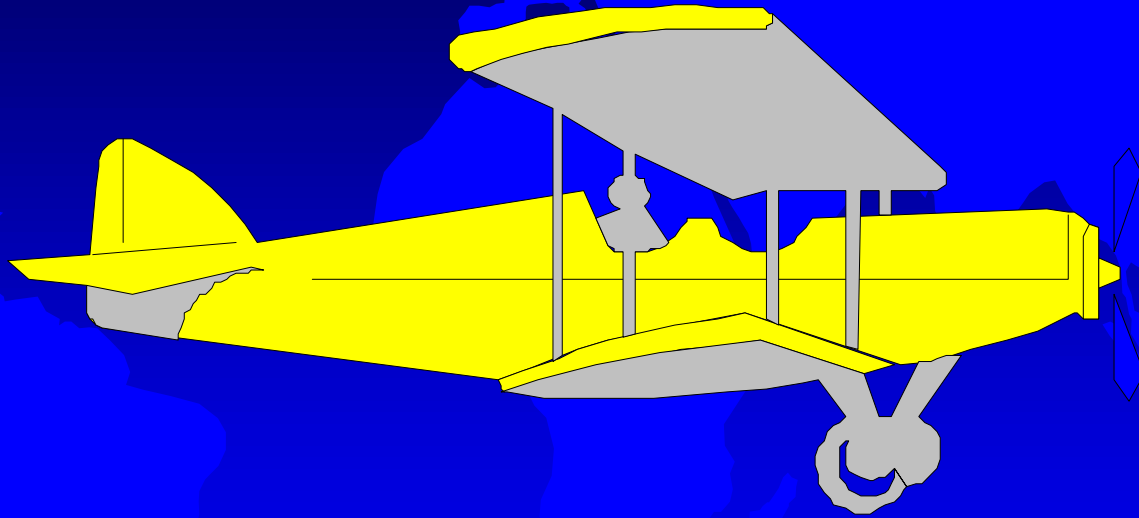
DOS-Based System

Paradox[®] Database Engine

Local Area Network

OPSS

Growth for the future



The Future is Now!



The New OPSS

Windows-Based Client

Microsoft NT/SQL Server Database

LAN/WAN Platform

Word for Windows 7.0



Features and Functions

- ◆ **MAINTAIN**
- ◆ **GENERATE**
- ◆ **REPORTS**



New Features for a New Generation

◆ Information

- ☐ Paragraph and OpSpecs Tracking**
- ☐ Industry and Military Input - CRAF**
- ☐ Industry Can Also Create OpSpecs**
- ☐ Development of Non-Standard Paragraphs**
- ☐ Faster Approval Process**



New Features for a New Generation

◆ Automation

- ❑ Windows and cc:Mail Integration**
- ❑ Data Synchronization via WAN & RAS**
- ❑ All Updates are Electronic**
- ❑ Available to FSDOs, Regional Offices, Industry, DOT, and the Military**



New Features for a New Generation

◆ More Function

- ❑ Queries on the Fly**
- ❑ Electronic Signatures - ECSS**
- ❑ All OpSpecs Available to View**



OPSS CHDO Help

◆ Points of Contact:

□ CC Mail:

- 9 OPSSPROB

□ Technical Support:

- (202) 267-7724 or (202) 267-9991

□ Website Address:

- WWW.OPSPECS.COM

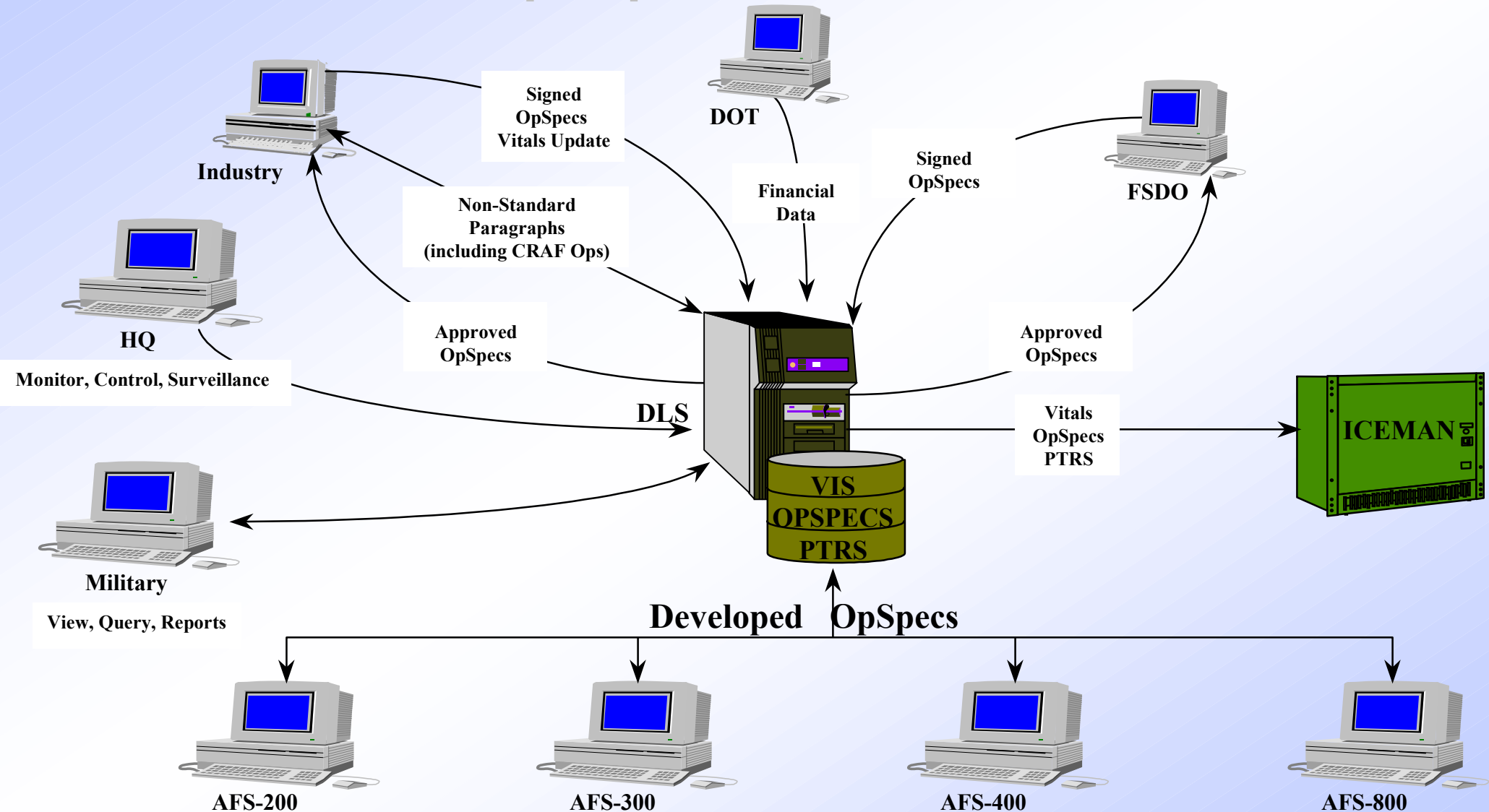


Address <http://www.opspecs.com>

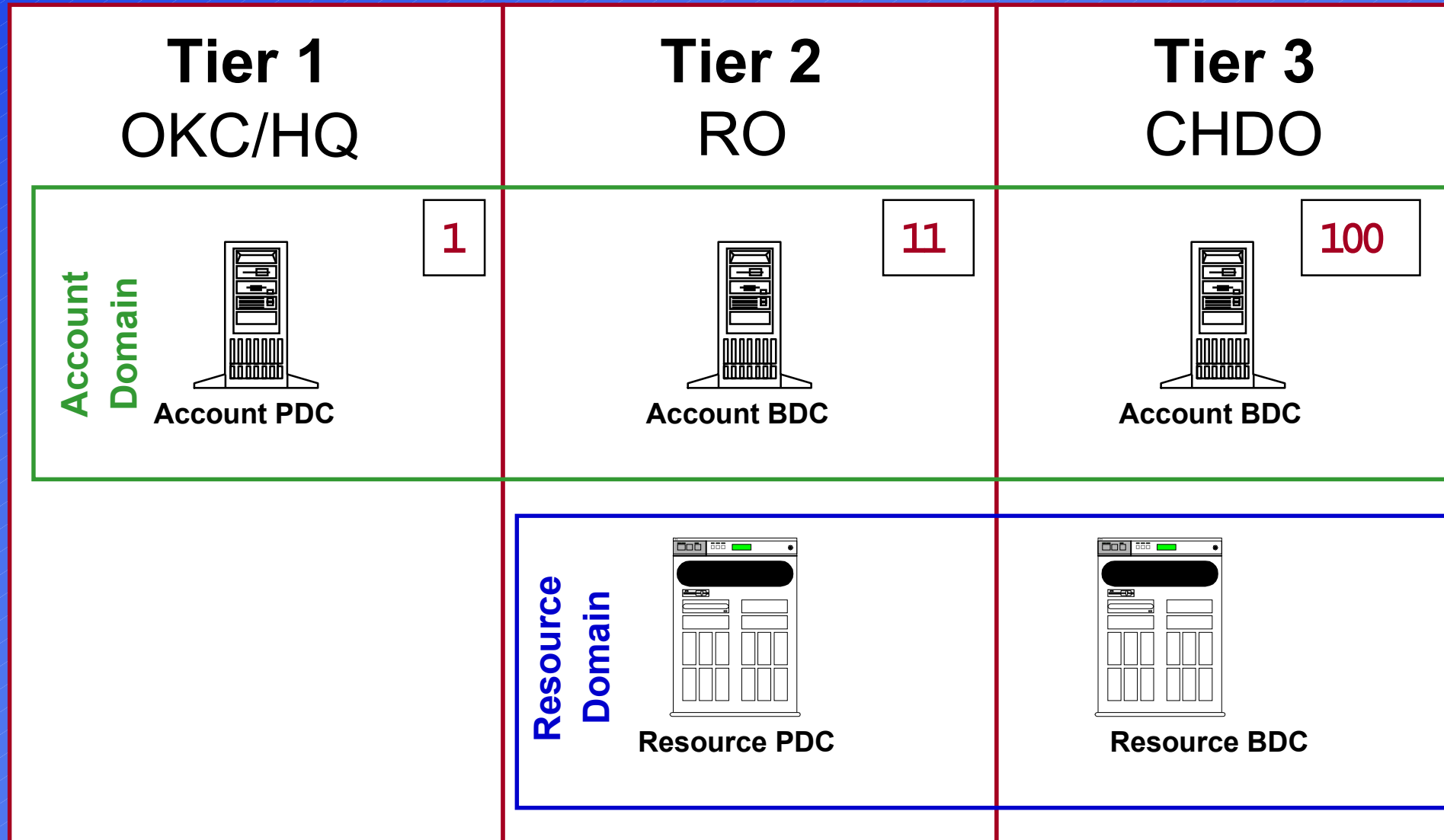
- ◆ Central repository for OpSpecs information. This site contains:
 - ❑ Support functionality—Notify us about a software bug or make a suggestion
 - ❑ OPSS documentation—Software manuals for download or in hypertext form for easy browsing
 - ❑ MMELs and MMEL Policy Letters
 - ❑ Flight Standardization Board Reports

OPSS - CHDO

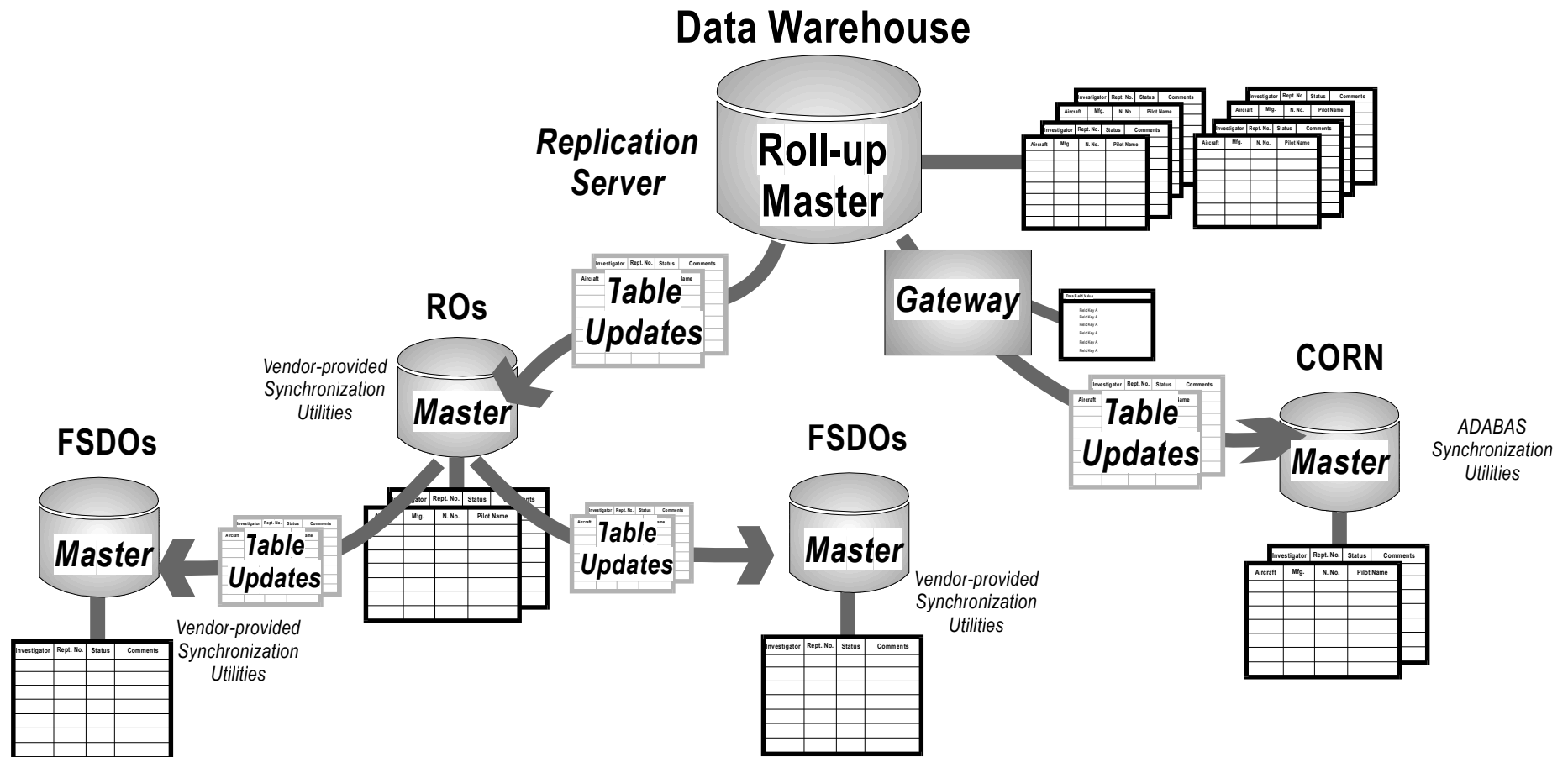
OpSpecs Process



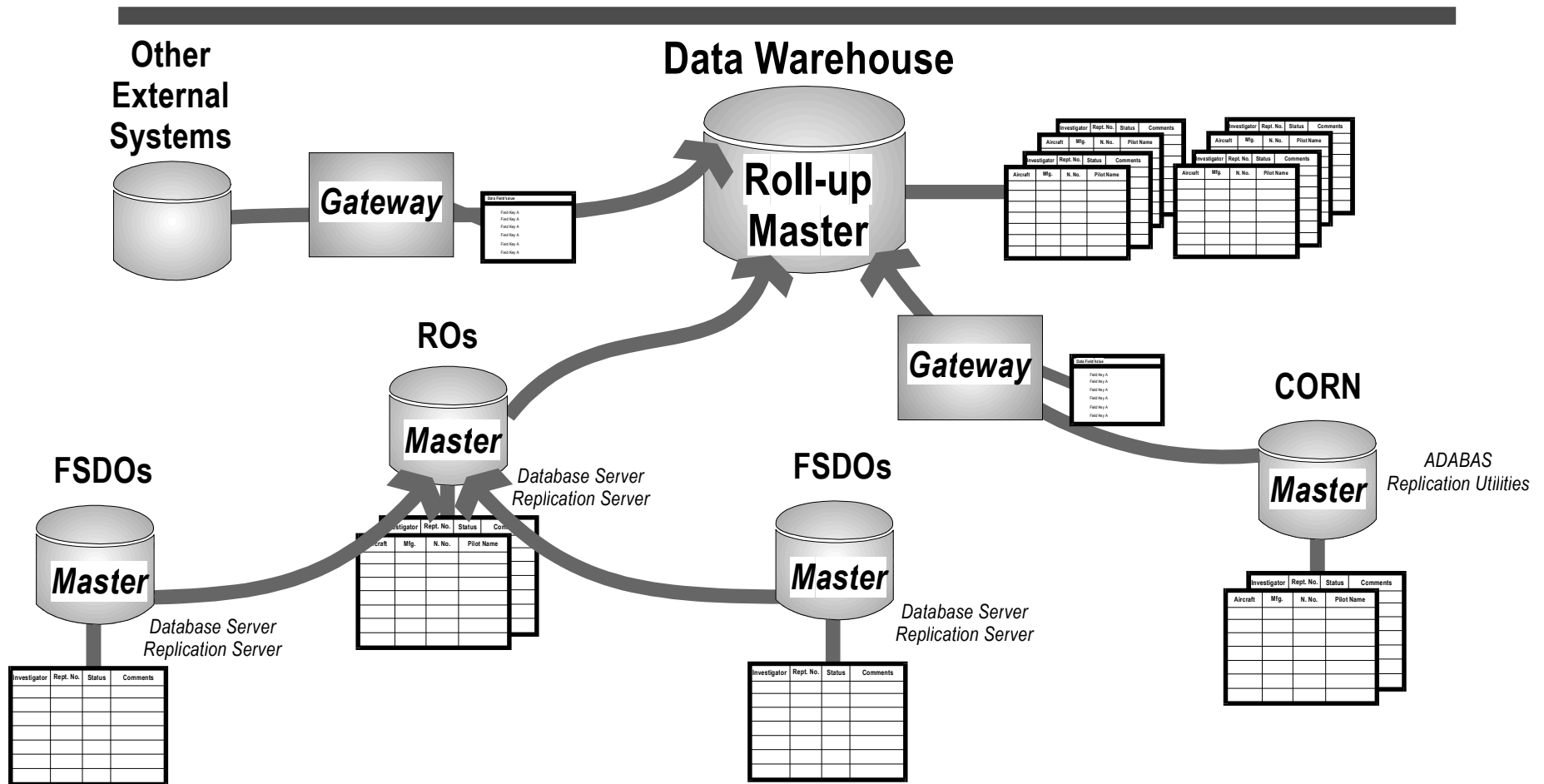
AVR's 3-Tier Architecture



Data Quality—Ideal Enterprisewide Database Replication Model Redistribution Stage

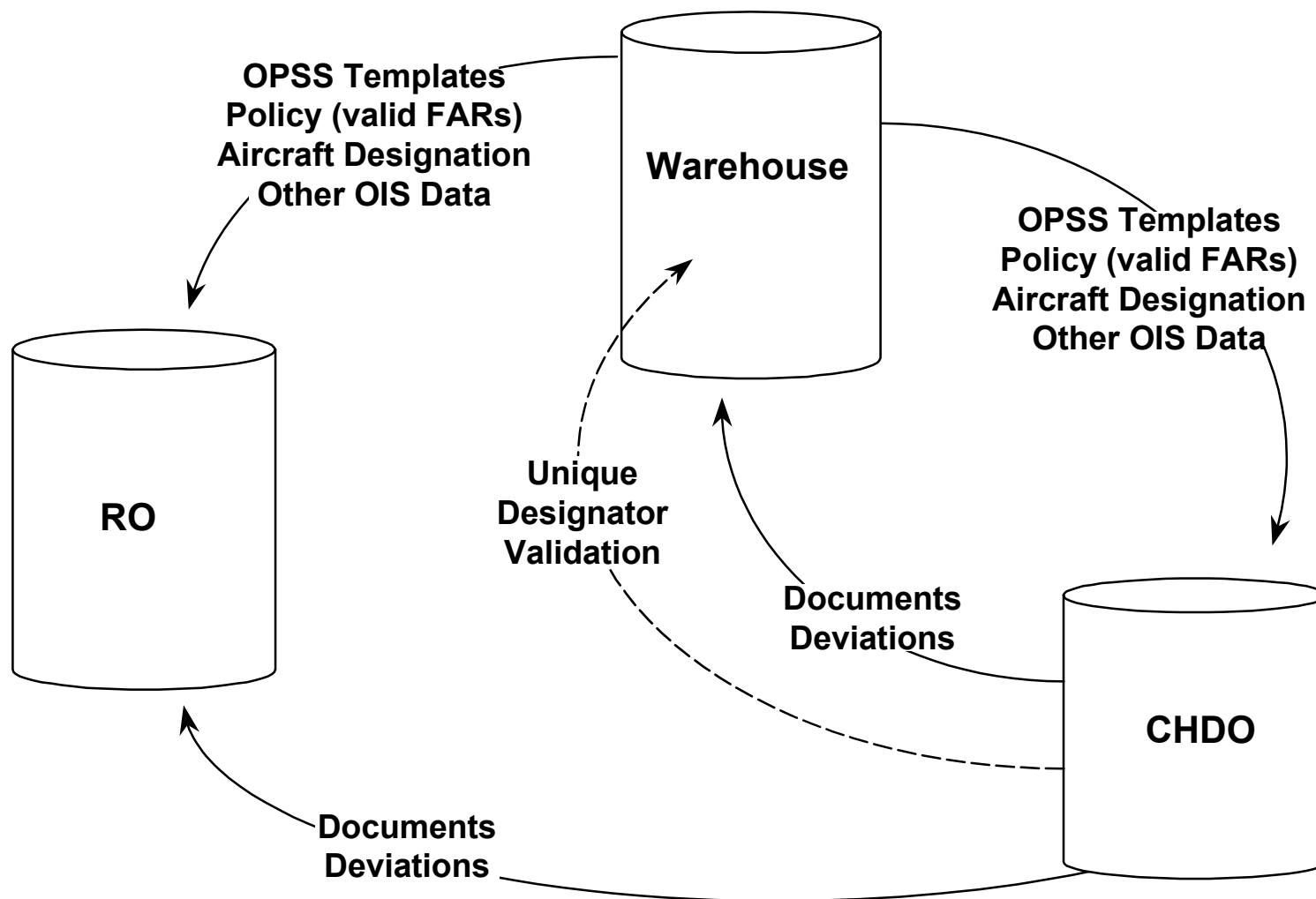


Data Quality—Ideal Enterprisewide Database Replication Model Update Stage





REPLICATION



Paragraph Development

Current FARS...

121

137

145

135

133

129

121/135

142

125

OPSS Workflow

CHDO Document Process

ANS: **Proposed and Revisions** H: Good 07/26
H: Question 00

Technical skills and technical content are reviewed for accuracy, content, and format and for the following components and standards with the 14 official field regions (FR). Technical skills and technical content are reviewed for accuracy and format for the components and standards with the 14 field CR.

a. **Experiences**

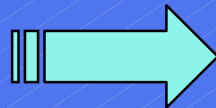
Experiences/Value	Time/Experiences	Revisions/Revisions
101 Experiences/Value	101 Time/Experiences	101 Revisions/Revisions

CR: Technical skills and technical content are reviewed for accuracy and format for the components and standards with the 14 field CR.

b. **Education**

Applicable CR/Section	Revisions/Revisions
101 Applicable CR/Section	101 Revisions/Revisions

CR: Technical skills and technical content are reviewed for accuracy and format for the components and standards with the 14 field CR.



ANS: **Proposed and Revisions** H: Good 07/26
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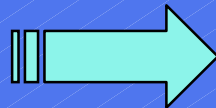
CR: Technical skills and technical content are reviewed for accuracy and format for the components and standards with the 14 field CR.



Draft

OpSpec

HQ Paragraph Process



AUS: Exponential Decay

$I(t) = I_0 e^{-\lambda t}$ $\lambda = \frac{D}{H}$

Exponential decay is a natural decay under periodic random decay processes, such as radioactive decay. It is the inverse exponential growth, and is characterized by the half-life (also called mean lifetime τ). Exponential decay is sometimes also referred to as exponential relaxation, for the exponential behavior towards the "0" or the GR.

a) **Exercises**

Exponential Value	Half-Lifetime	Decay-constant λ
Half Exponential Value	Half-Lifetime	Exponential Value

Exponential decay is a natural decay under periodic random decay processes, such as radioactive decay.

b) **Exercises**

Applied Exponential	Decay-constant λ
Half Exponential Value	Exponential Value

Exponential decay is a natural decay under periodic random decay processes, such as radioactive decay.



AUS: Explain and define **HQ and OP/PE**
HQ and OP/BE

Threumia's table is a useful tool to order questions in a number of different ways, and can also be broken down further to investigate specific details in a number of ways. It is a bit of a cheat sheet! Read it! Threumia's table is a useful tool to order questions in a number of different ways, and can also be broken down further to investigate specific details in a number of different ways. It is a bit of a cheat sheet! Read it!

1. Explain

<u>Explain</u>	<u>Define</u>	<u>Describe and Discuss</u>
What is the question?	What is the question?	Describe the question

2. Define

<u>Define</u>	<u>Describe and Discuss</u>
What is the question?	Describe the question

3. Describe and Discuss

<u>Describe and Discuss</u>
Describe the question

Active

Released



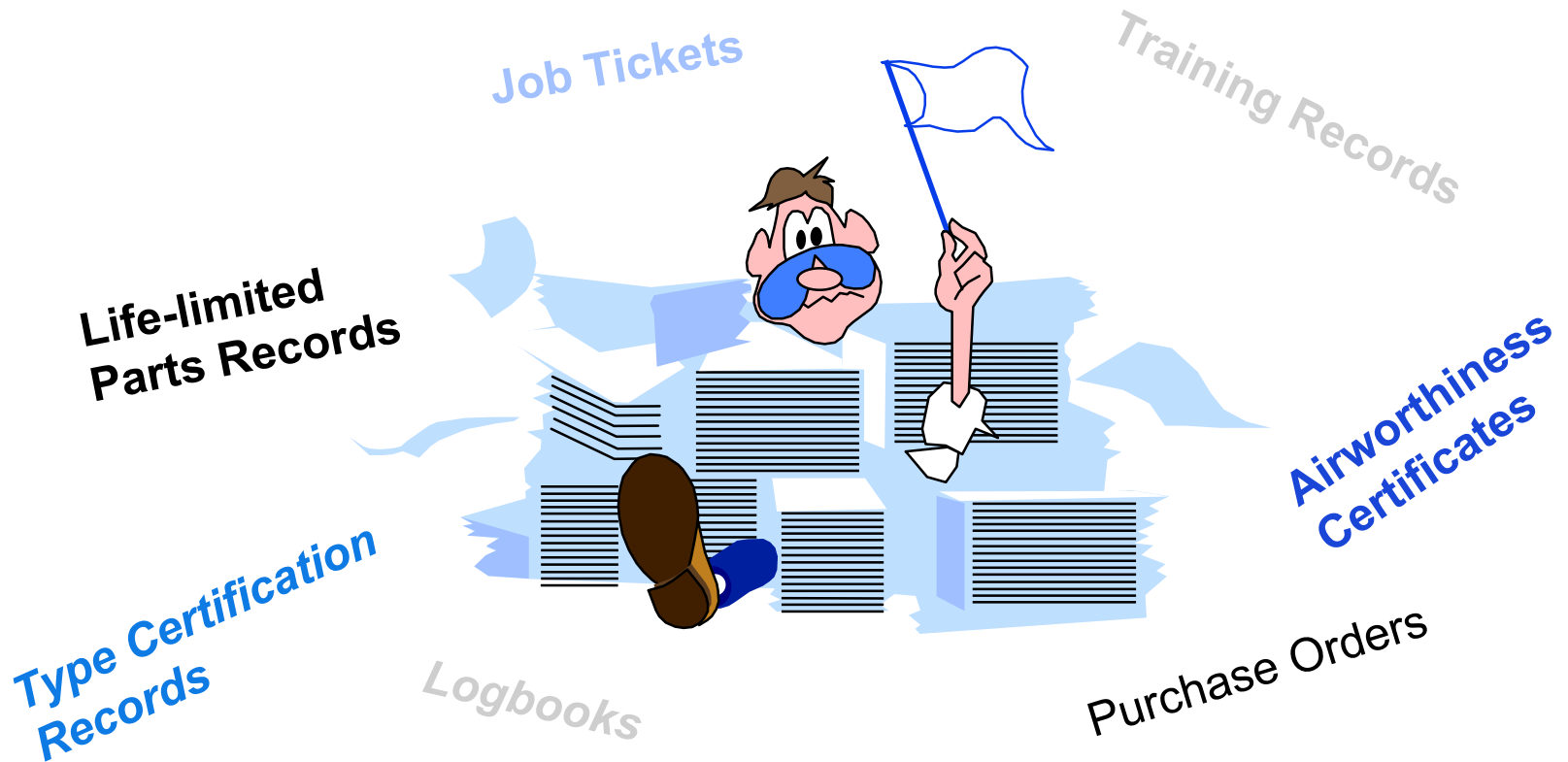
OPSPECS

How can you get access to it today
ARINC

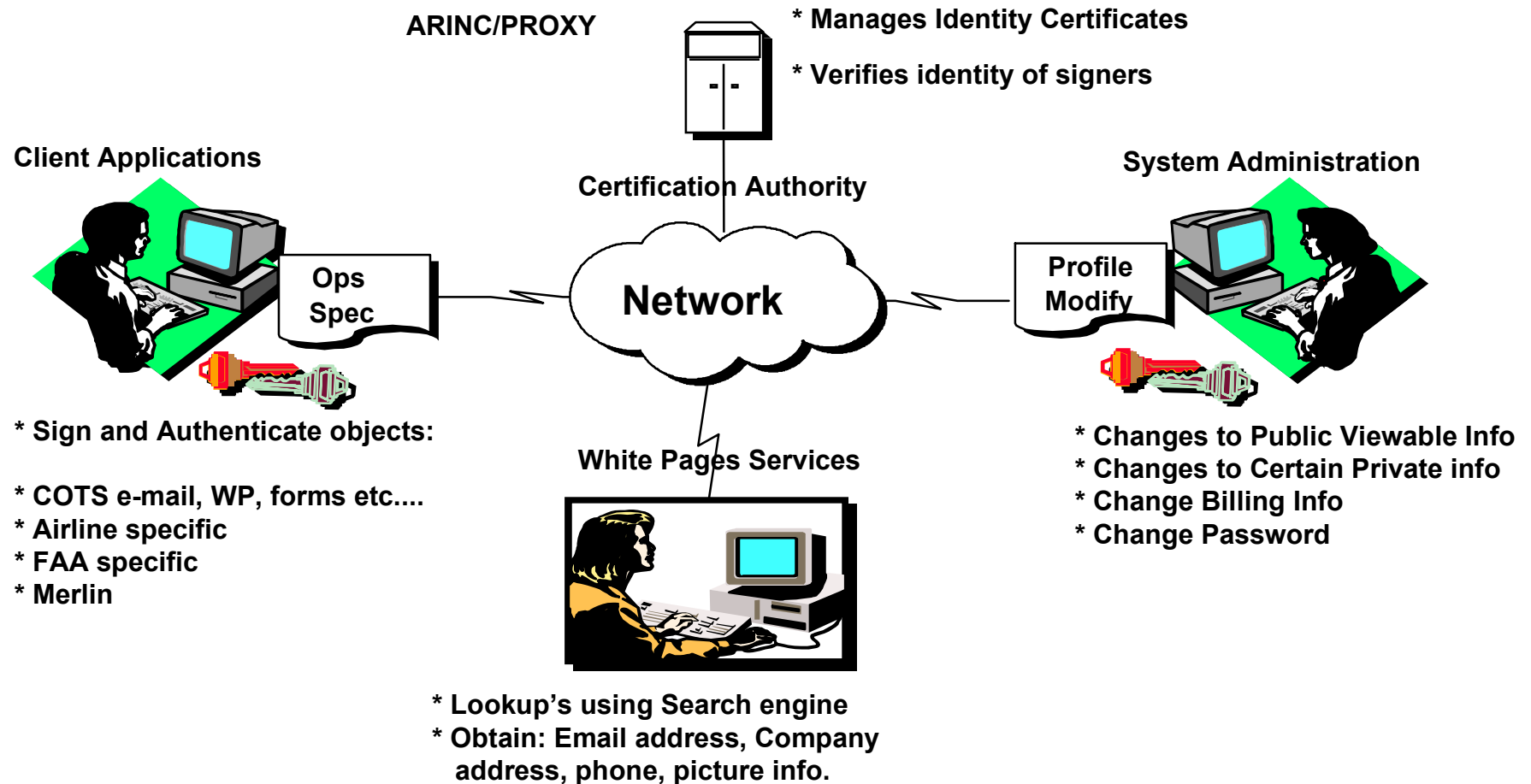
Electronic Signature



AIRLINE INDUSTRY NEED FOR DIGITAL DOCUMENTS



How a Digital Signature Works



WHAT ARE THE BENEFITS TO THE AIRLINE INDUSTRY?

- ◆ Authenticity and non-repudiation of signed documents
- ◆ Date/Time stamp from trusted third party
- ◆ Manual labor savings through automation
- ◆ Faster processing of documentation
- ◆ Automated error checking and enhanced accuracy
- ◆ Rapid on-line retrieval and analysis of data
- ◆ Improved access protection
- ◆ Clear identification of who signed the document

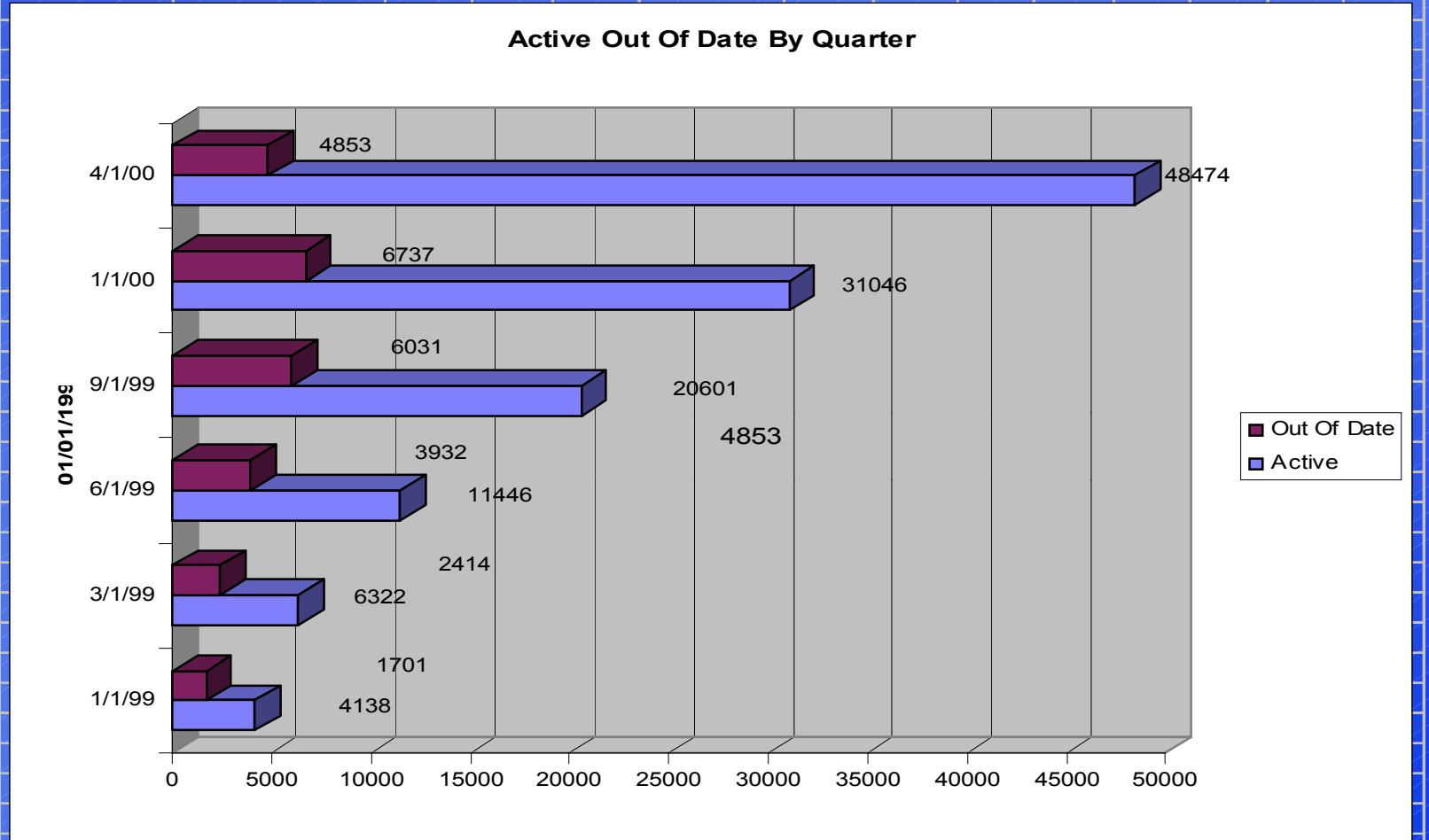
HOW CAN THE AIRLINE INDUSTRY USE DIGITAL SIGNATURES?

- ◆ Electronic Logbooks
- ◆ Maintenance Record Keeping
- ◆ Life-Limited Parts Tracking
- ◆ Pilot Records
- ◆ Any Digital Document:
 - ◆ Requiring Multiple Levels of Approval
 - ◆ Where Authenticity of Originator / Recipient Must Be Known
 - ◆ Where Date-Time Document Signed Must Be Known
 - ◆ Where Contents Must Not Be Changed After Document Was Signed
- Digital Document = OpSpecs = A Good Start

Paragraph Development

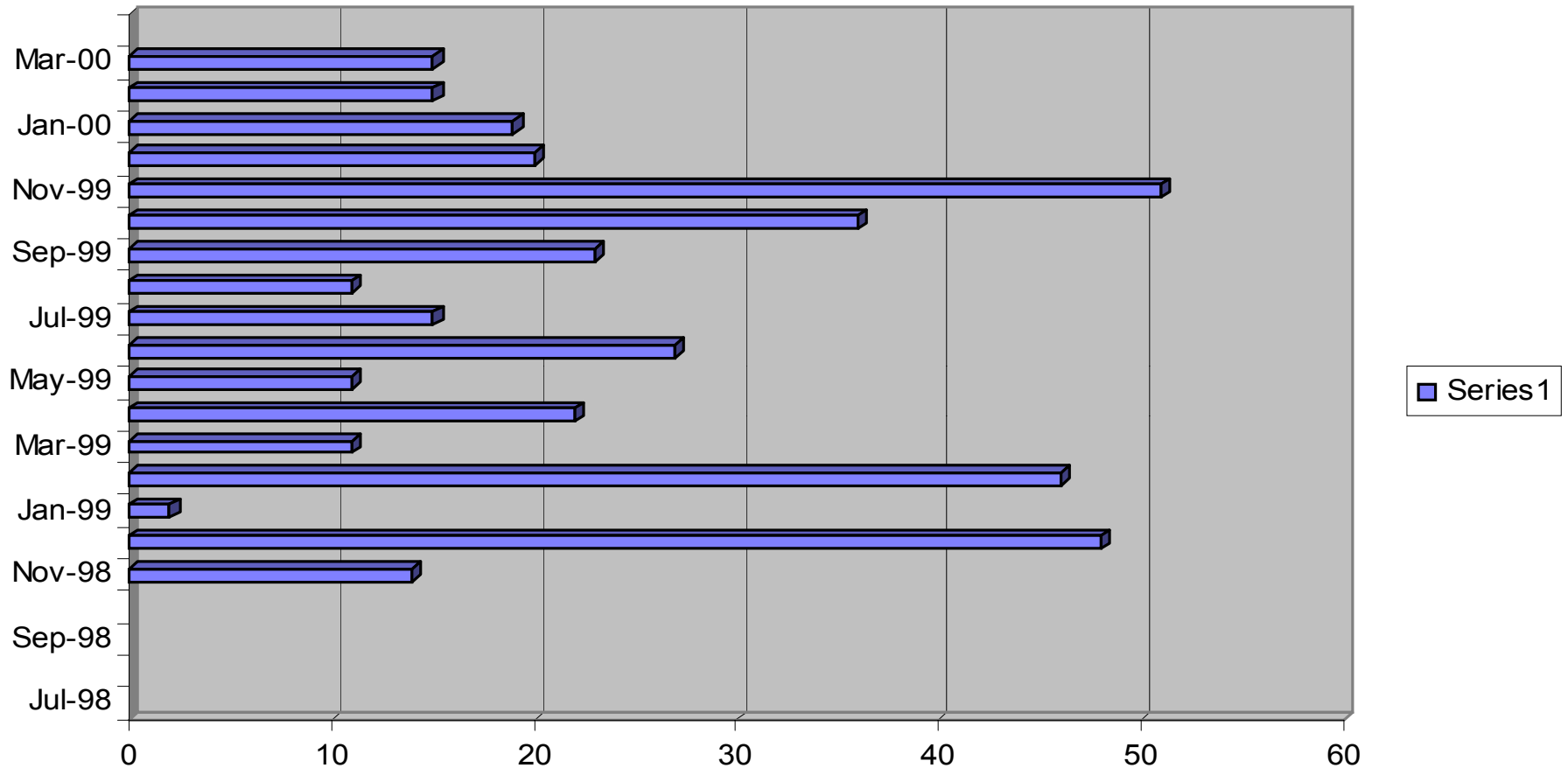
Date		Active	Out Of Date		121	135	121/135	125	129	133	137	141	142	145	147
1/1/98	1/1/99	4138	1701	41%	312	3152	153	1	1	71	0	0	68	377	0
1/1/98	3/1/99	6322	2414	38%	446	4722	189	38	19	85	0	0	101	717	0
1/1/98	6/1/99	11446	3932	34%	981	8007	240	125	23	107	0	0	184	1759	0
1/1/98	9/1/99	20601	6031	29%	1661	13299	476	300	417	148	0	0	293	4007	0
1/1/98	1/1/00	31046	6737	22%	2852	19538	761	376	628	176	0	0	412	6303	0
1/1/98	4/1/00	48474	4853	10%	4611	29566	933	521	1107	267	0	0	600	7492	0

Over time it is important to note the change in paragraph templates and the currency of those paragraphs. This slides illustrates, in 3 month cycle, the increase in issued paragraphs with out dated templates



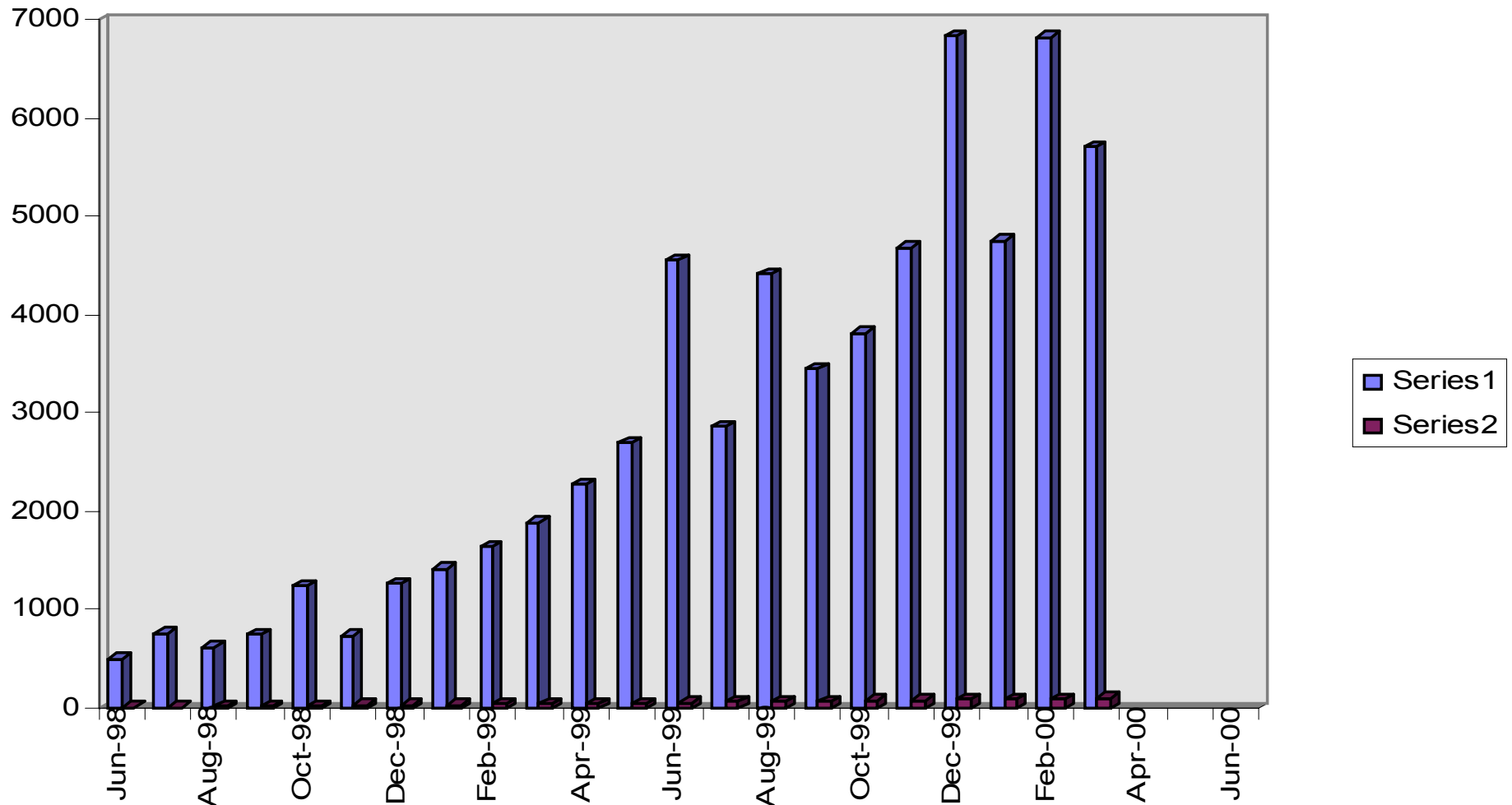
Paragraph Status

HQ New Para released Per Month



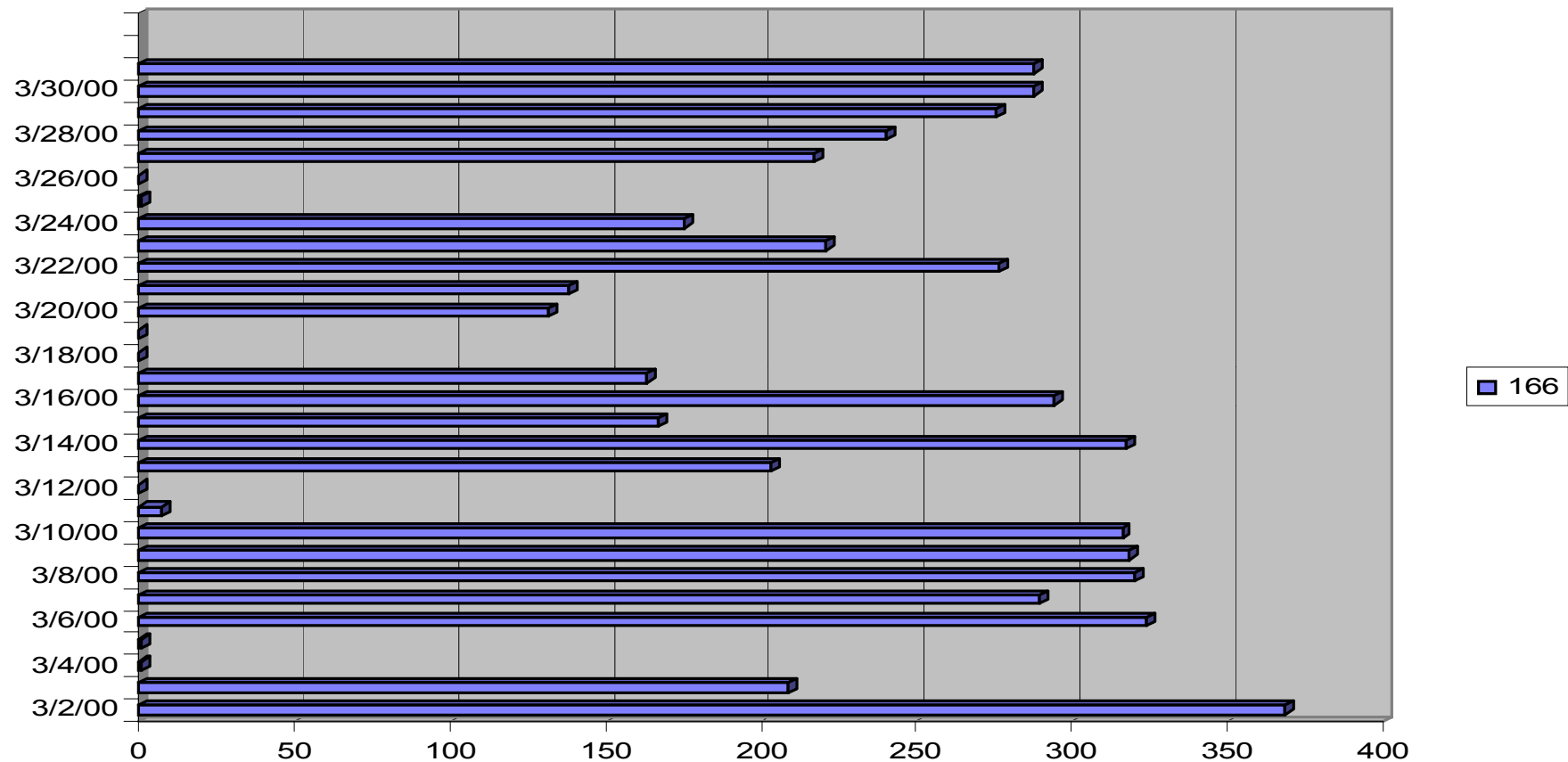
Paragraph Status

Para Per Month



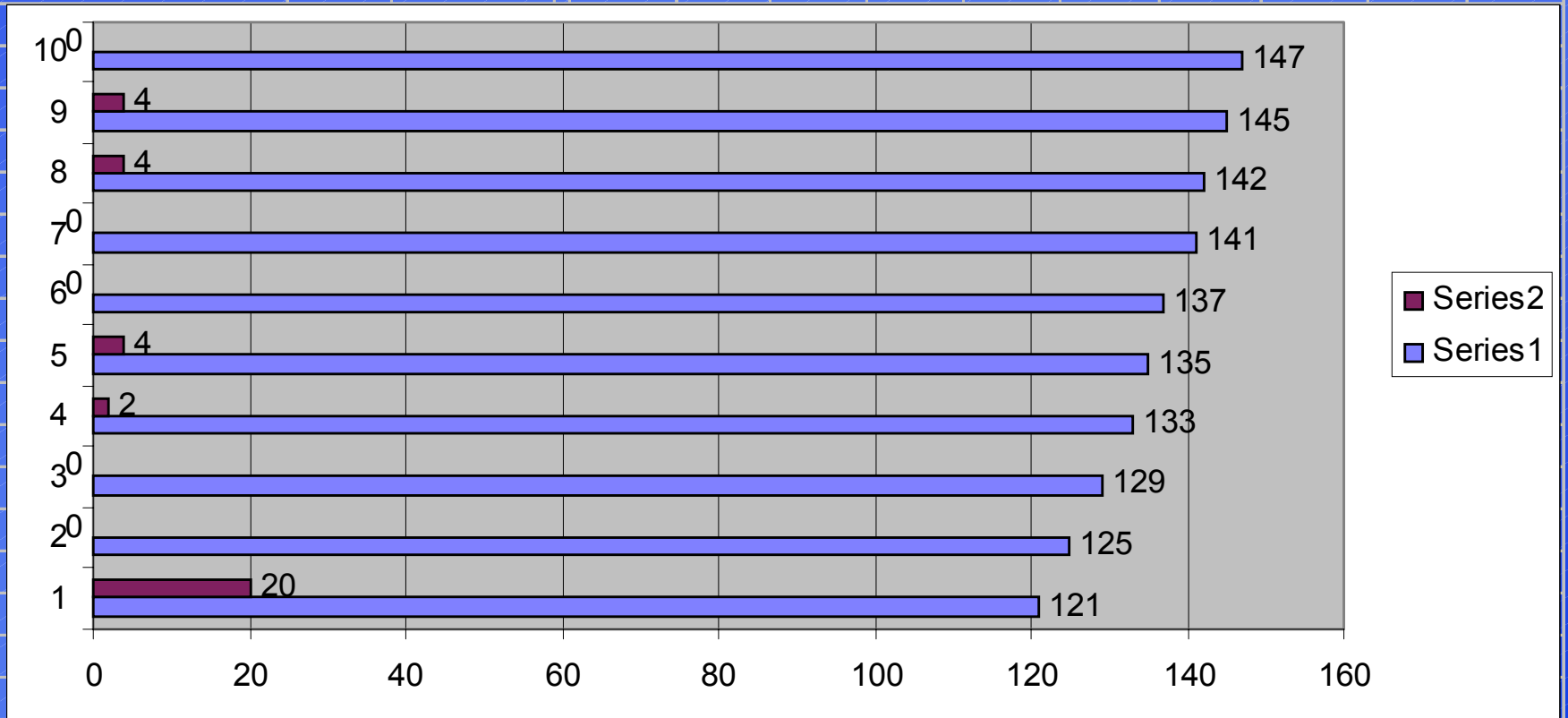
Paragraph Status

MAR. 2000 PARA PER DAY



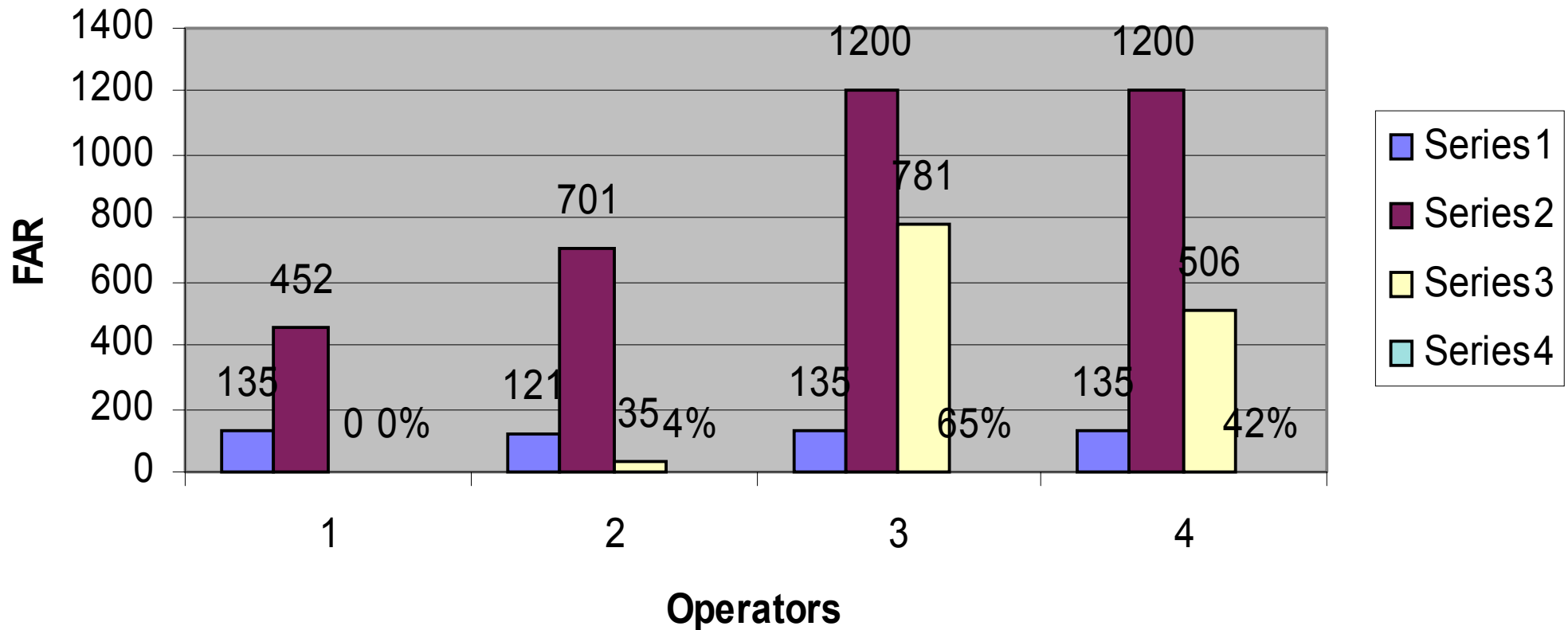
Paragraph Status IOPSS

			121	125	129	133	135	137	141	142	145	147
			20	0	0	2	4	0	0	4	4	0



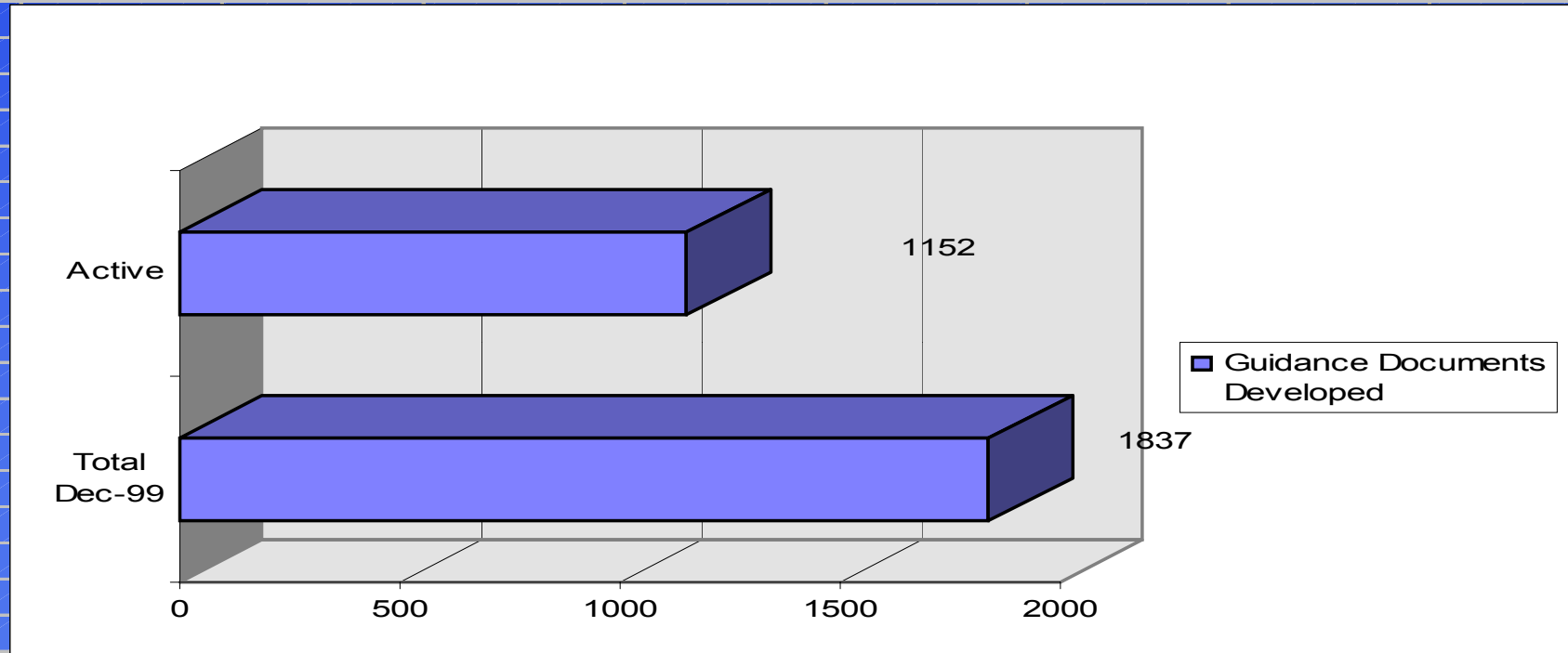
Insurance

Operators Insurance Documents Entered



Paragraph Guidance

Dec-99	Total	1837						
	Active	1152						

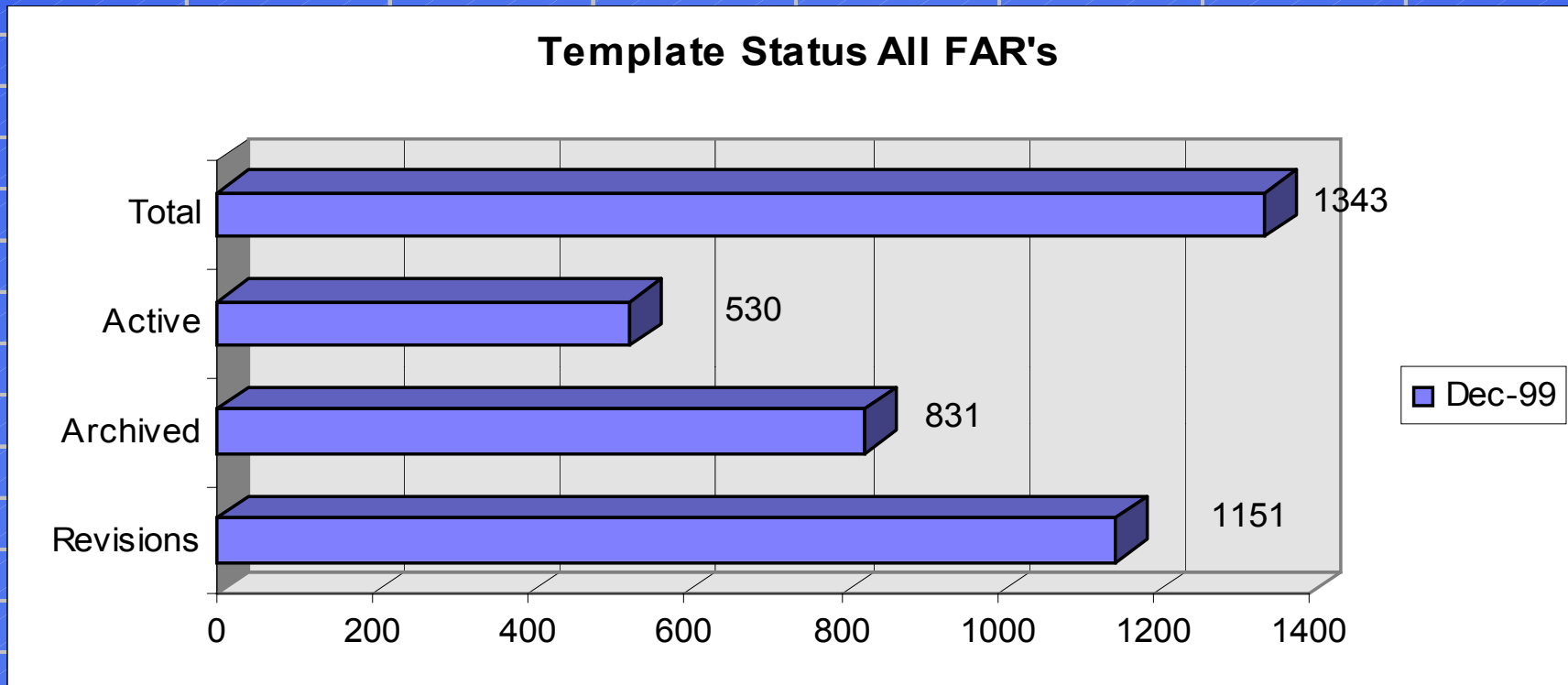


The Guidance System is another important part to OPSS system. Providing real-time guidance to the Inspectors alleviating them of the need to look through volums of documents. As of Dec. 99 there were a total of 1837 pieces of documentation pertinent to Opspec Insurance. Currently we provide 1152 pieces of information

Paragraph Status

Date	Date	Dec-99									
FAR	Dec-99	121	121/135	135	125	129	133	137	141	142	145
Active		98	133	122	62	51	9	0	0	36	8
Archived		319	373	334	130	79	24	0	0	38	29

Paragraph Templates

[illegible]



OPSS



System Preview